



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

JUN 06 2006

MEMORANDUM

SUBJECT: Amendment Document for the Quality Assurance Project Plan for the Integrated Site Assessment of the United Zinc #1 Site; Iola, Kansas - Approved

FROM: Diane Harris *Diane Harris*
Regional Quality Assurance Manager
ENSV/DISO

TO: Eddie McGlasson
On-Scene Coordinator
SUPR/ER&R

The review of the subject document has been completed according to "EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations," EPA QA/R-5 March 2001. The document was also reviewed for consistency with the previously reviewed Quality Assurance Project Plan for the Integrated Site Assessment of the United Zinc #1 Site (QA Document Number: 2006153).

The Amendment Document is approved; it, in combination with the previously reviewed QAPP for this site and the "Generic Quality Assurance Project Plan for the Superfund Integrated Site Assessment and Targeted Brownfields Assessment Programs," July 2005, complies with R-5 and addresses the key issues satisfactorily.

If you have any questions, please contact me at x7258.

R7QAO Document Number: 2006154

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Superfund



June 1, 2006

Amendment Document:

Quality Assurance Project Plan

Integrated Site Assessment of the United Zinc #1 Site, Iola, Kansas

U.S. EPA Region 7 START, Contract No. EP-S7-06-01, Task Order No. 011.000

Task Monitor: Eddie McGlasson, On-Scene Coordinator

Region 7 Superfund Program Quality Assurance Project Plan Form for the United Zinc #1 Site			
Project Information:			
Site Name: United Zinc #1 Site		City: Iola	State: Kansas
EPA Project Manager: Eddie McGlasson		START Project Manager: Rick Claytor	
		Prepared For: EPA Region 7 Superfund Division	
		Prepared By: Rick Claytor Tetra Tech / Katy Miley EPA	
Approved By: <i>Rick Claytor for Eddie McGlasson</i>		Date: June 1, 2006	
Title: EPA Project Manager		Date: 6/1/06	
Approved By: <i>Diane Harris</i>		Date: 06/06/2006	
Title: EPA Superfund QA Coordinator		Tetra Tech START Project Number:	
1.0 Project Management:			
1.1 Distribution List			
EPA—Region 7: Eddie McGlasson, EPA Project Manager Diane Harris, Regional QA Manager		Tetra Tech START: , Project Manager	
1.2 Project/Task Organization			
Eddie McGlasson, of the EPA Region 7 Superfund Division, will serve as the EPA project manager for the activities described in this QAPP. Rick Claytor, of Seagull Environmental Technologies, Inc. (SETI), will serve as the START project manager for field activities.			
1.3 Problem Definition/Background:			
Description: This site-specific Quality Assurance Project Plan form is prepared as an addendum to the Quality Assurance Project Plan, Integrated Site Assessment of the United Zinc #1 Site, Iola, Kansas, U.S. EPA Region 7 START, Contract No. EP-S7-06-01, Task Order No. 011.000 , and contains site-specific data quality objectives for the sampling activities described herein.			
<input checked="" type="checkbox"/> Description attached.			
<input type="checkbox"/> Description in referenced report: _____			
Title		Date	
1.4 Project/Task Description:			
<input type="checkbox"/> CERCLA PA <input type="checkbox"/> CERCLA SI <input type="checkbox"/> Brownfields Assessment			
<input type="checkbox"/> Other (description attached): <input type="checkbox"/> Pre-CERCLIS Site Screening <input checked="" type="checkbox"/> Removal Assessment			
Other Description:			
Schedule: Field work is scheduled to begin in June, 2006. This portion of the project is anticipated to last approximately three weeks.			
<input type="checkbox"/> Description in referenced report: _____			
Title		Date	

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Purpose:

This amendment to the original QAPP is intended to cover six additional samples that will be taken in the city of Iola, Kansas, for the analysis of lead bioavailability. Collection of this data will enable EPA to determine lead concentrations that may result in significant human health risks for the citizens of Iola, Kansas.

Sampling Strategy and Methodology:

The proposed sampling scheme will be judgmental, in accordance with the Guidance for Performing Site Inspections Under CERCLA, OSWER Directive #9345.1-05, September 1992, and "Removal Program Representative Sampling Guidance, Volume 1: Soil, OSWER Directive 9360.4-10, November 1991. Judgmental sampling is the subjective (biased) selection of sampling locations based on historical information, visual inspection, and the best professional judgment of the sampler(s).

Soil screening and sampling activities at residential properties will be conducted in accordance with *Superfund Lead-Contaminated Residential Sites Handbook*, OSWER 9285.7-50, August 2003. Exact sample locations will be determined during reconnaissance activities performed in the field. The proposed number of samples is a provided in the table below.

Samples will be collected as described in the original QAPP, and each sample split into two, four ounce jars. Split samples will be labeled with the sample identification, and provided to the EPA laboratory in Region 7. The EPA laboratory will then analyze one of the splits for each sample according to The In-Vitro Method Relative Bioavailability Leaching Procedure SOP developed by J.W. Drexler, Ph.D, at the University of Colorado. The START Contractor will send the other split for each sample to the University of Colorado for their analyses using The In-Vitro Method Relative Bioavailability Leaching Procedure SOP developed by J.W. Drexler, Ph.D.

Sample Summary Location	Matrix	# of Samples*	Analysis
Residential yards, parks, school yards, daycare centers	Soil	4	Lead Isotope, Metals analysis following the In-Vitro Method, Relative Bioavailability Leaching Procedure
Foundry sand, smelter slag	Foundry sand, smelter slag	2	Lead Isotope, Metals analysis following the In-Vitro Method, Relative Bioavailability Leaching Procedure
*NOTE: Background/QC samples are not included with these totals. See original QAPP for a complete sample summary.			
**NOTE: Samples will be collected from four residential yards with previously analyzed lead concentrations greater than 1200 ppm, and two samples will be collected from the area of the former smelter site.			

Analytical Method:

The In-Vitro Method, Relative Bioavailability Leaching Procedure consists of an aqueous fluid, into which the sample is introduced. The solution than solubilizes the media under simulated gastric conditions. Once this procedure is complete, the solution is analyzed for

lead concentrations using EPA method 6010B. The mass of the lead found in the filtered extract is compared to the mass introduced into the test. The fraction liberated into the aqueous phase is defined as the bioavailable fraction of lead or arsenic in that media.

Data Quality:

The EPA Region 7 Project Manager will compare the results from the split samples, and data within 20% Relative Percent Difference (RPD) will be accepted.

All data management, data review, and sample handling protocols will be addressed as specified in the original QAPP.